

GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: October 17, 2005, 12:13:25 ; Search time 115.62 Seconds  
(without alignments)  
498.419 Million cell updates/sec

Title: US-10-601-105-2  
Perfect score: 769  
Sequence: 1 MCCPRMFPALYLVSFSR.....KKRRKRVTKCLEQVSQL 149

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues  
Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database :  
1: Geneseq\_16Dec04:.\*  
2: Geneseqp1980s:.\*  
3: Geneseqp1990s:.\*  
4: Geneseqp2000s:.\*  
5: Geneseqp2001s:.\*  
6: Geneseqp2003as:.\*  
7: Geneseqp2003bs:.\*  
8: Geneseqp2004s:.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	769	100.0	149	7 ADD05351	Ado5351 Human int
2	769	100.0	149	8 ADD05318	Ado5318 Human IL-
3	763	99.2	149	3 AAY88414	Aay88414 Human int
4	739	96.1	164	5 ABP64806	ABP64806 Human pro
5	707	91.9	159	3 AAY97365	Aay97365 Human thy
6	707	91.9	159	3 AAY88415	Aay88415 Supplemen
7	707	91.9	159	5 ABP72263	ABP72263 Primatc (
8	707	91.9	159	6 AAE37155	AAe37155 Human thy
9	707	91.9	159	6 ADD05353	Add05353 Human int
10	707	91.9	159	7 ADF29182	Adf29182 Human thy
11	707	91.9	159	7 ADG43811	Adg43811 Human thy
12	707	91.9	159	8 ADOS0320	Ado50320 Human IL-
13	696.5	90.6	160	6 AAE37163	AAe37163 Human thy
14	689	89.6	159	6 AAE37162	AAe37162 Human thy
15	677	88.0	159	6 AAE37158	AAe37158 Human thy
16	675	87.8	155	6 AAE37159	AAe37159 Human thy
17	670.5	87.2	154	6 AAE37161	AAe37161 Human thy
18	669.5	87.1	154	6 AAE37160	AAe37160 Human thy
19	652	84.8	149	3 AAY93962	Aay93962 Amtno aci
20	652	84.8	149	5 AAE26440	AAe26440 Human TAN
21	574	74.6	131	7 ADF29186	Adf29186 Human JY1
22	214	27.8	140	6 AAE37154	AAe37154 Mouse thy
23	183	23.8	36	4 ABB41950	Abb41950 Peptide #
24	183	23.8	36	4 AAM35752	Aam35752 Peptide #
25	183	23.8	36	4 ABB25603	Abb25603 Protein #

26	183	23.8	36	4 AAM75641	Aam75641 Human bon
27	183	23.8	36	4 AAM62827	Aam62827 Human bra
28	183	23.8	36	4 ABG57383	Abg57383 Human liv
29	183	23.8	36	5 ABG45148	Abg45148 Human pep
30	125.5	16.3	123	3 AAY93964	Aay93964 Amtno aci
31	125.5	16.3	123	5 AAE26441	AAe26441 Mouse TAN
32	83	10.8	828	3 AAG36819	Aag36819 Arabidops
33	83	10.8	907	3 AAG36818	Aag36818 Arabidops
34	83	10.8	912	3 AAG36817	Aag36817 Arabidops
35	81.5	10.6	674	6 ADA35168	Ada35168 Actinocoba
36	77.5	10.1	310	4 AAB92923	Aab92923 Human pro
37	77.5	10.1	1038	4 AAB94063	Aab94063 Human pro
38	77.5	10.1	1544	2 AAY41109	Aay41109 Human can
39	77.5	10.1	1544	6 ABR47563	Abri47563 Breast ca
40	77.5	10.1	1544	8 ADR93132	Adri93132 Putative
41	77.5	10.1	1681	8 ADQ19097	Adq19097 Human sof
42	76.5	9.9	367	8 ADK16583	Adk16583 Nanoarcha
43	76	9.9	447	8 ADS21960	Ads21960 Bacterial
44	75.5	9.8	284	3 AAG27922	Aag27922 Arabidops
45	75.5	9.8	316	3 AAG27921	Aag27921 Arabidops

ALIGNMENTS

RESULT 1	ADD05351	ADD05351 standard; protein, 149 AA.
XX	XX	XX
AC	ADD05351:	
XX	XX	XX
DE	01-JAN-2004	(first entry)
XX	XX	XX
DE	Human interleukin-B50 (IL-B50) polypeptide #1.	
XX	XX	XX
KW	Human; interleukin-B50; IL-B50; immune disorder; T cell immunodeficiency;	
KW	chronic inflammation; tissue rejection; cardiovascular condition;	
KW	neurophysiological condition; antinflammatory; immunosuppressive;	
KW	immunostimulant; cardiac; neuroprotective.	
XX	XX	XX
OS	Homo sapiens.	
XX	XX	XX
PH	Key	Location/Qualifiers
FT	Misc-difference	% /note= "Encoded by CGN"
XX	XX	XX
PN	US2003099947-A1.	
XX	XX	XX
PD	29-MAY-2003.	
XX	XX	XX
PE	25-SEP-2001; 2001US-00963347.	
XX	XX	XX
PR	23-SEP-1998; 96US-0101318P.	
PR	27-APR-1999; 99US-0131298P.	
PR	20-SEP-1999; 99US-00399492.	
XX	XX	XX
PA	(BAZA/) BAZAN J F.	
PA	(MALE/) DE WAAL MALEFYT R.	
PA	(LIUY/) LIU Y.	
PA	(SOWM/) SOWMELIS V.	
XX	XX	XX
PI	Bazan JF, De Waal Malefyt R, Liu Y, Soumelis V,	
XX	XX	XX
DR	WPI; 2003-777307/73.	
DR	N-PSDB; ADD05350.	
XX	XX	XX
PT	Novel isolated or recombinant polynucleotide encoding antigenic human	
PT	interleukin-B50 sequence which is useful for treating T cell	
PT	immunodeficiencies, chronic inflammation or tissue rejection, or	
PT	cardiovascular conditions.	
XX	XX	XX
PS	Claim 16; SEQ ID NO 2; 54pp; English.	
XX	XX	XX

CC The invention relates to the human interleukin-B50 (IL-B50) polypeptide  
 CC and the polynucleotide encoding it. The polypeptide is useful for making  
 CC an antigenic polypeptide. The antigenic polypeptide is useful for binding  
 CC an antigen in a biological sample, where it forms a binding compound-  
 CC antigen complex. The polypeptide is also useful in forensic sciences to  
 CC distinguish rodent from human, or as a marker for distinguishing between  
 CC different cells exhibiting differential expression or modification  
 CC patterns. The sequences are useful for creating abnormal medical  
 CC conditions such as immune disorders e.g., T cell immunodeficiencies,  
 CC chronic inflammation or tissue rejection, or cardiovascular or  
 CC neurophysiological conditions. This sequence represents a human IL-B50  
 CC polypeptide of the invention.

XX Sequence 149 AA:

Query Match 100.0%; Score 769; DB 7; Length 149;  
 Best Local Similarity 100.0%; Pred. No. 2.1e-80;  
 Matches 149; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MGCPRMPPALLYLSVSRKIFILQVLVLTDFNCPDFEKIKAYISTISKDLITTM 60  
 DB 1 MGCPRMPPALLYLSVSRKIFILQVLVLTDFNCPDFEKIKAYISTISKDLITTM 60  
 QY 61 SGTKSTFNNNTVSCSNRPHCLTEIOSLTFFNPNRRVRSIAKEMFAMTKKALAIWCPGYSE 120  
 DB 61 SGTKSTFNNNTVSCSNRPHCLTEIOSLTFFNPNRRVRSIAKEMFAMTKKALAIWCPGYSE 120  
 QY 121 TQINATQAMKKRRKRKVTNNKCLEQVSOL 149  
 DB 121 TQINATQAMKKRRKRKVTNNKCLEQVSOL 149

RESULT 2

ID ADO50318 standard; protein; 149 AA.

XX ADO50318;

DT 29-JUL-2004 (first entry)

XX Human IL-B50 protein #1.

DE Cytokine; Interleukin-B50; IL-B50; differentiation; haematopoietic cell;  
 KW immune disorder; T cell immune deficiency; chronic inflammation;  
 KW tissue rejection; cardiovascular; neurophysiological; antigen; immunogen;  
 KW human.

XX Homo sapiens.

XX Key Location/Qualifiers

FT Peptide 1..33 /label= Signal\_peptide

FT Protein 94..149 /label= Mature\_IL-B50

FT Misc-difference 94 /note= "Encoded by CGN"

FT US2004091970-A1.

XX 13-MAY-2004.

XX 20-JUN-2003; 2003US-00601105.

XX 21-SEP-1998; 98US-0101318P.

XX 27-APR-1999; 99US-0131298P.

XX 20-SEP-1999; 99US-00399492.

XX 25-SEP-2001; 2001US-00963347.

XX (SCHE ) SCHERING CORP.

XX Bazan JF, De Waal Malefyt R, Liu Y, Soumelis V,  
 XX WPI, 2004-374953/35.

DR N-PSDB; ADO50317.

XX Novel isolated or recombinant polynucleotide such as cytokine e.g., IL-  
 PT B50 useful for producing an antigenic polypeptide, for treating T cell  
 PT immune deficiencies, chronic inflammation, tissue rejection or  
 PT cardiovascular conditions.

PS Claim 16; SEQ ID NO 2; 55pp; English.

XX The invention relates to polynucleotide encoding cytokine interleukin-B50  
 CC (IL-B50). The polynucleotide and polypeptide of the invention are useful  
 CC for regulating activation, development, differentiation and function of  
 CC various cell types, including haematopoietic cells, for treating abnormal  
 CC medical conditions e.g., immune disorders such as T cell immune  
 CC deficiencies, chronic inflammation, tissue rejection, cardiovascular or  
 CC neurophysiological conditions. The polypeptide is useful as antigen e.g.,  
 CC immunogen, for raising antibodies to various epitopes on the protein,  
 CC both linear and conformational epitopes. The present sequence is human IL-  
 CC B50.

XX Sequence 149 AA:

Query Match 100.0%; Score 769; DB 8; Length 149;  
 Best Local Similarity 100.0%; Pred. No. 2.1e-80;  
 Matches 149; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MGCPRMPPALLYLSVSRKIFILQVLVLTDFNCPDFEKIKAYISTISKDLITTM 60  
 DB 1 MGCPRMPPALLYLSVSRKIFILQVLVLTDFNCPDFEKIKAYISTISKDLITTM 60  
 QY 61 SGTKSTFNNNTVSCSNRPHCLTEIOSLTFFNPNRRVRSIAKEMFAMTKKALAIWCPGYSE 120  
 DB 61 SGTKSTFNNNTVSCSNRPHCLTEIOSLTFFNPNRRVRSIAKEMFAMTKKALAIWCPGYSE 120  
 QY 121 TQINATQAMKKRRKRKVTNNKCLEQVSOL 149  
 DB 121 TQINATQAMKKRRKRKVTNNKCLEQVSOL 149

RESULT 3

ID AAY88414 standard; protein; 149 AA.

XX AAY88414;

DT 31-JUL-2000 (first entry)

XX Human interleukin-B50 amino acid sequence.

XX Human; interleukin-B50; IL-B50; cytokine; haematopoietic cell;  
 KW inflammation; autoimmune disorder; forensic science.

XX Homo sapiens.

XX Key Location/Qualifiers

FT Peptide 1..33 /label= Signal\_peptide

FT Protein 34..149 /label= IL-B50

FT Misc-difference 94 /label= unknown

FT /note= "Encoded by CGN"

XX WO200017362-A1.

XX 30-MAR-2000.

XX 20-SEP-1999; 99WO-US020871.

XX 21-SEP-1998; 98US-00157749.

XX 27-APR-1999; 99US-0131298P.

XX (SCHE ) SCHERING CORP.

XX Bazan JF;  
 PI WPI: 2000-283587/24.  
 DR N-PSDB; AAA15633.  
 XX  
 PT New human interleukin (IL)-B50 nucleic acid, useful in forensic science  
 PT and for the production of IL-B50 which plays a role in the regulation or  
 PT development of hematopoietic cells.  
 PS Claim 18; Page 10; 79pp; English.  
 XX  
 CC This sequence represents a human interleukin-B50 (IL-B50) amino acid  
 CC sequence. IL-B50 is a short chain cytokine and has significant structural  
 CC and sequence similarity to IL-7. It is likely that IL-B50 has either a  
 CC stimulatory or inhibitory effect on hematopoietic cells. The present  
 CC sequence relates IL-B50 nucleotide and amino acid sequences, an  
 CC expression vector comprising the IL-B50 encoding nucleotide sequence,  
 CC host cells containing the expression vector, and a method for the  
 CC production of the antigenic polypeptide through the expression of the  
 CC nucleotide sequence. Nucleotide sequences encoding IL-B50 may be useful  
 CC in forensic science. IL-B50 plays a role in the regulation or development  
 CC of hematopoietic cells, e.g. lymphoid cells, which affect immunological  
 CC responses, e.g. inflammation and/or autoimmune disorders. Alternatively,  
 CC it may affect vascular physiology or development, or neuronal effects. IL  
 CC -B50, its fragments and anti-IL-B50 antibodies, along with compounds  
 CC identified as having binding affinity to IL-B50 should be useful as  
 CC reagents in the treatment of conditions associated with abnormal  
 CC physiology or development including inflammatory conditions. They may  
 CC also be useful in *in vitro* tests for the presence or absence of  
 CC interacting components, which may correlate with the success of  
 CC particular treatment strategies  
 CC  
 CC Sequence 149 AA;  
 SQ  
 Query Match 99.2%; Score 763; DB 3; Length 149;  
 Best Local Similarity 99.3%; Pred. No. 1e-79;  
 Matches 148; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 MGCPRMPPALVLSVSPKRIPILOVGLVLTDFDTCDFEIKAKAYISTISKDLITTM 60  
 DB 1 MGCPRMPPALVLSVSPKRIPILOVGLVLTDFDTCDFEIKAKAYISTISKDLITTM 60  
 QY 61 SGTGSTFNNNTVSCSNRPCHLTETISLTENPNRVRSLAKEMPMKTKALAIWCPGYSE 120  
 DB 61 SGTGSTFNNNTVSCSNRPCHLTETISLTENPNRVRSLAKEMPMKTKALAIWCPGYSE 120  
 QY 121 TOINATQAMKKRKRKRVTTNKCLEOVSQL 149  
 DB 121 TOINATQAMKKRKRKRVTTNKCLEOVSQL 149  
 RESULT 4  
 ID ABP64806 standard; protein; 164 AA.  
 XX  
 AC ABP64806;  
 XX  
 DT 25-FEB-2003 (first entry)  
 XX  
 DE Human protein SEQ ID 466.  
 XX  
 KW Human; expressed sequence tag; EST; hematopoietic disorder;  
 KW central nervous system disease; viral infection;  
 KW peripheral nervous system disease; non-healing wound; infectious disease;  
 KW immune deficiency; immune disorder; bacterial infection; allergy; cancer;  
 KW fungal infection; autoimmune disorder; coagulation disorder; noctropic;  
 KW anti-allergic; anti-inflammatory; immunosuppressive; neuroprotective;  
 KW cytotoxic; haemostatic; virucide; antibacterial; fungicide;  
 KW immunostimulant; cerebroprotective.  
 XX  
 OS Homo sapiens.  
 XX

PN WO200259260-A2.  
 XX  
 PD 01-AUG-2002.  
 XX  
 PF 16-NOV-2001; 2001WO-US042950.  
 XX  
 PR 17-NOV-2000; 2000US-00714936.  
 XX  
 PA (HYSB-) HYSBQ INC.  
 XX  
 PI Tang,XT, Goodrich RW, Liu C, Zhou P, Asundi V, Zhang J, Zhao QA;  
 PI Ren F, Xue AJ, Yang Y, Wehrman T, Drmanac RT;  
 DR N-PSDB; ABQ9392.  
 XX  
 DR WPI: 2002-590824/63.  
 XX  
 PT New isolated polynucleotide, useful in research, diagnostic or  
 PT therapeutic methods, e.g. preventing or treating disorders involving  
 PT aberrant protein expression or biological activity.  
 PS Claim 20; SEQ ID NO 466; 394pp; English.  
 XX  
 CC The present invention relates to novel human coding sequences (ABQ9268-  
 CC ABQ99608) and proteins (ABP64682-ABP65022). The sequences are useful in  
 CC therapeutic, diagnostic and research methods. The polynucleotides may be  
 CC used in the field of molecular biology as hybridisation probes, primers  
 CC for PCR, for chromosome and gene mapping, for the recombinant production  
 CC of protein, or in generation of anti-sense DNA or RNA. The  
 CC polynucleotides are useful in diagnostics as expressed sequence tags  
 CC (ESTs) for identifying expressed genes or for physical mapping of the  
 CC human genome. The proteins may be used as molecular weight markers, or as  
 CC nutritional sources or supplements. The proteins may be used to maintain  
 CC and expand cell population in a totipotent or pluripotent state  
 CC useful for re-engineering damaged or diseased tissues, transplantation,  
 CC manufacture of bio-pharmaceuticals or the development of bio-sensors. The  
 CC polynucleotides and proteins are useful for preventing, treating or  
 CC ameliorating disorders involving aberrant protein expression or  
 CC biological activity, e.g. hematopoietic disorders, central/peripheral  
 CC nervous system diseases, mechanical and traumatic disorders, non-healing  
 CC wounds, immune deficiencies and disorders, infectious diseases caused by  
 CC viral, bacterial or fungal infection, autoimmune disorders, allergic  
 CC reactions and conditions, coagulation disorders, or cancer. The  
 CC polynucleotide sequences of the invention were assembled from ESTs  
 CC isolated mainly by sequencing by hybridisation, and in some cases  
 CC sequences obtained from one or more public databases. Note: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format directly from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 CC  
 CC Sequence 164 AA;  
 SQ  
 Query Match 96.1%; Score 739; DB 5; Length 164;  
 Best Local Similarity 96.6%; Pred. No. 6.9e-77;  
 Matches 144; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
 QY 1 MGCPRMPPALVLSVSPKRIPILOVGLVLTDFDTCDFEIKAKAYISTISKDLITTM 60  
 DB 1 MGCPRMPPALVLSVSPKRIPILOVGLVLTDFDTCDFEIKAKAYISTISKDLITTM 60  
 QY 61 SGTGSTFNNNTVSCSNRPCHLTETISLTENPNRVRSLAKEMPMKTKALAIWCPGYSE 120  
 DB 61 SGTGSTFNNNTVSCSNRPCHLTETISLTENPNRVRSLAKEMPMKTKALAIWCPGYSE 120  
 QY 121 TOINATQAMKKRKRKRVTTNKCLEOVSQL 149  
 DB 121 TOINATQAMKKRKRKRVTTNKCLEOVSQL 149  
 RESULT 5  
 ID AAY97365 standard; protein; 159 AA.  
 XX  
 AC AAY97365;  
 XX

```

XX 05-SEP-2000 (first entry)
DT Human thymic stromal lymphopoietin (TSLP).
XX
XX Human; thymic stromal lymphopoietin; TSLP; B cell maturation;
KW immune regulation; cell proliferation; cell differentiation; cell death;
KW cell migration; cell-to-cell interaction; inflammatory response;
KW chromosome 5q21-22; Gardner syndrome; adenomatous polyposis coli;
KW hereditary desmoid disease; Turcot syndrome; colorectal cancer.
XX
XX Homo sapiens.
OS
XX WO200029581-A1.
XX
XX 25-MAY-2000.
XX
XX 12-NOV-1999; 99WO-US027069.
XX
XX 13-NOV-1998; 98US-0108452P.
XX
XX (IMMUNEX CORP.
XX
XX Sims J, Lyman S, McKenna H, Armstrong A;
XX WPI; 2000-387794/33.
XX N-PSDB; AAA30331.
XX
XX New human thymic stromal lymphopoietin (TSLP) polypeptide useful for
XX stimulating lymphocyte development and proliferation.
XX
XX Claim 11; Fig 2; 78pp; English.
XX
XX The present sequence is the protein sequence of human thymic stromal
XX lymphopoietin (TSLP). It was isolated by searching an EST library for
XX sequences similar to the murine TSLP sequence. The protein is involved in
XX the growth and differentiation of B and T cells. It can be used to study
XX processes such as immune regulation, cell proliferation, cell death, cell
XX migration, cell-to-cell interaction and inflammatory responses. The
XX nucleic acid can be used to identify human chromosome 5, to map genes
XX along this chromosome, to identify genes on this chromosome which are
XX associated with diseases, including Gardner syndrome, adenomatous
XX polyposis coli, hereditary desmoid disease, Turcot syndrome and
XX colorectal cancer, and to inhibit or induce B and T cell proliferation
XX
XX Sequence 159 AA;
SQ
Query Match 91.9%; Score 707; DB 3; Length 159;
Best Local Similarity 96.5%; Pred. No. 3.3e-73;
Matches 139; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
QY 6 MPPFALLVYLSVFRKIFILQVGLVTVDFNCDPEFKIAAVALSTISXDLITYMSGTGS 65
DB 1 MPPFALLVYLSVFRKIFILQVGLVTVDFNCDPEFKIAAVALSTISXDLITYMSGTGS 60
QY 66 TEFNNTVSCSNRPHCTEIQSLTFNPNRVRSLAKEMFAMKTKAALAIWCPGSETOINA 125
DB 61 TEFNNTVSCSNRPHCTEIQSLTFNPNRVRSLAKEMFAMKTKAALAIWCPGSETOINA 120
QY 126 TOAMKRRKRRKVTNNKCLEQVSOL 149
DB 121 TOAMKRRKRRKVTNNKCLEQVSOL 144
RESULT 6
AAV88415
ID AAV88415 standard; protein; 159 AA.
XX
XX AAV88415,
AC
XX
XX 31-UTL-2000 (first entry)
DT Supplemental human interleukin-B50 amino acid sequence.
DE

```

```

XX Human; interleukin-B50; IL-B50; cytokine; haematopoietic cell;
KW inflammation; autoimmune disorder; forensic science.
XX
XX Homo sapiens.
OS
XX Key Location/Qualifiers
XX Peptide 1..28
XX Protein 29..159
XX /label= IL-B50
XX
XX WO200017362-A1.
XX
XX 30-MAR-2000.
XX
XX 20-SEP-1999; 99WO-US020871.
XX
XX 21-SEP-1998; 98US-00157749.
XX 27-APR-1999; 99US-0131298P.
XX
XX (SCHE ) SCHERING CORP.
XX
XX Bazan JF;
XX WPI; 2000-283587/24.
XX N-PSDB; AAA15634.
XX
XX New human interleukin (IL)-B50 nucleic acid, useful in forensic science
XX and for the production of IL-B50 which plays a role in the regulation or
XX development of hematopoietic cells.
XX
XX Claim 18; Page 11; 79pp; English.
XX
XX This sequence represents a human interleukin-B50 (IL-B50) amino acid
XX sequence. IL-B50 is a short chain cytokine and has significant structural
XX and sequence similarity to IL-7. It is likely that IL-B50 has either a
XX stimulatory or inhibitory effect on haematopoietic cells. The present
XX sequence relates IL-B50 nucleotide and amino acid sequences, an
XX expression vector comprising the IL-B50 encoding nucleotide sequence,
XX host cells containing the expression vector, and a method for the
XX production of the antigenic polypeptide through the expression of the
XX nucleotide sequence. Nucleotide sequences encoding IL-B50 may be useful
XX in forensic science. IL-B50 plays a role in the regulation or development
XX of haematopoietic cells, e.g. lymphoid cells, which affect immunological
XX responses, e.g. inflammation and/or autoimmune disorders. Alternatively,
XX it may affect vascular physiology or development, or neuronal effects. IL
XX B50, its fragments and anti-IL-B50 antibodies, along with compounds
XX identified as having binding affinity to IL-B50 should be useful as
XX reagents in the treatment of conditions associated with abnormal
XX physiology or development including inflammatory conditions. They may
XX also be useful in in vitro tests for the presence or absence of
XX interacting components, which may correlate with the success of
XX particular treatment strategies
XX
XX Sequence 159 AA;
SQ
Query Match 91.9%; Score 707; DB 3; Length 159;
Best Local Similarity 96.5%; Pred. No. 3.3e-73;
Matches 139; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
QY 6 MPPFALLVYLSVFRKIFILQVGLVTVDFNCDPEFKIAAVALSTISXDLITYMSGTGS 65
DB 1 MPPFALLVYLSVFRKIFILQVGLVTVDFNCDPEFKIAAVALSTISXDLITYMSGTGS 60
QY 66 TEFNNTVSCSNRPHCTEIQSLTFNPNRVRSLAKEMFAMKTKAALAIWCPGSETOINA 125
DB 61 TEFNNTVSCSNRPHCTEIQSLTFNPNRVRSLAKEMFAMKTKAALAIWCPGSETOINA 120
QY 126 TOAMKRRKRRKVTNNKCLEQVSOL 149
DB 121 TOAMKRRKRRKVTNNKCLEQVSOL 144

```

RESULT 7	
ABP72263	
ID	ABP72263 standard; protein; 159 AA.
XX	
AC	ABP72263;
XX	
DT	28-APR-2003 (first entry)
XX	
DE	Primate (humanised human) cytokine IL-B50.
XX	
KW	Primate; human; Rdelta2; IL-7Ralpha; cytokine; IL-B50; receptor; haematopoiesis; dendritic cell; cytostatic; immunosuppressive; antiallergic.
XX	
OS	Homo sapiens.
XX	
FH	Key
FT	Peptide
FT	Protein
FT	Protein
XX	
PN	WO200268646-A2.
XX	
PD	06-SEP-2002.
XX	
PF	09-NOV-2001; 2001WO-US050351.
XX	
PR	10-NOV-2000; 2000US-0247218P.
PR	14-JUN-2001; 2001US-0298268P.
XX	
PA	(SCHE ) SCHERING CORP.
XX	
PI	Reche-Gallardo PA, De Waal Malefyz R, Bazan JF, Kastelein RA; Lin Y;
XX	
DR	WPI; 2002-706997/76.
DR	N-PSDB; AB258385.
XX	
PT	Producing a ligand:receptor complex, useful for affecting mammalian physiology, including hematopoietic cell proliferation or immune system function, comprising contacting IL-B50 with IL-7Ralpha or Rdelta2 subunit to form a complex.
PT	
PS	Disclosure: Fig 3A; 11pp; English.
XX	
CC	The present sequence is the protein sequence of primate (humanised human) IL-B50. The invention is based on the discovery that human IL-B50 is a novel haematopoietic cytokine and that IL-B50 signalling makes use of the combination of human IL-7Ralpha (see ABP72261) and human Rdelta2 (see ABP72262), which together form a novel hematopoietic cytokine receptor. Both receptor subunits are present on macrophages and dendritic cells, indicating functional effects of the cytokine on those cell types, and mediating functions provided by those cell types. The invention provides methods of producing the ligand:receptor complex, of modulating the physiology or development of an IL-7Ralpha or Rdelta2 expressing cell using an agonist or antagonist of IL-B50, of modulating a signal to a cell mediated by IL-B50, of selectively labelling a population of cells, and of testing a compound for ability to affect receptor-ligand interaction. Human IL-B50 improves dendritic cell survival in culture, up- regulates the expression of costimulatory molecules and adhesion molecules, induces dendritic cells to produce chemokines TNF $\alpha$ , PARC and MDC, and strongly promotes the capacity of dendritic cells to induce naive T-cells to proliferate and to produce interleukin-4, interleukin-13 and tumour necrosis factor-alpha. IL-B50 may be used to enhance dendritic cell function in treating cancers and infectious diseases, while IL-B50 antagonists may be used to block the function of dendritic cells in treating autoimmune diseases, allergic diseases, graft-versus-host disease and transplant rejection. The elucidation of IL-B50 receptor subunits allows for the identification of IL-B50 agonists and antagonists of use in these therapies. The dendritic cell expression of IL-7Ralpha and Rdelta2 indicates a role for IL-B50 in maturation of cells or

CC pathways important in antigen presentation, suggesting use of IL-B50 for  
 CC expansion, e.g. ex vivo, of antigen-presenting cells  
 XX  
 SQ Sequence 159 AA;  
 Query Match 91.9%; Score 707; DB 5; Length 159;  
 Best Local Similarity 96.5%; Pred. No. 3,36-73;  
 Matches 139; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
 Qy 6 MFPPALLIVLVSFSRRIPIQLVGLVLTPTDTCNDFEIKAKAYISTISKDLITVMSGRKS 65  
 Db 1 MFPPALLIVLVSFSRRIPIQLVGLVLTPTDTCNDFEIKAKAYISTISKDLITVMSGRKS 60  
 Qy 66 TEFNNVTVSCSNRPHCLREIOSLTENPNRRVSLAKEMPAKTKALAIWCPGSEPTQINA 125  
 Db 61 TEFNNVTVSCSNRPHCLREIOSLTENPNRRVSLAKEMPAKTKALAIWCPGSEPTQINA 120  
 Qy 126 TQAMKRRKRKRVTTNKKCLEQVSOL 149  
 Db 121 TQAMKRRKRKRVTTNKKCLEQVSOL 144  
 RESULT 8  
 AAE37155  
 ID AAE37155 standard; protein; 159 AA.  
 AC AAE37155;  
 DT 07-AUG-2003 (first entry)  
 DE Human thymic stromal lymphopoietin (TSLP) protein.  
 KW Thymic stromal lymphopoietin; TSLP; lymphopoiesis; STARS; antibacterial;  
 KW furin-resistant protein; lymphocyte; vaccine; AIDS; autoimmune disease;  
 KW transplant rejection; infection; immunosuppressive; immunostimulant;  
 KW virucide; human.  
 OS Homo sapiens.  
 PN WO2003032898-A2.  
 PD 24-APR-2003.  
 PF 23-JUL-2002; 2002WO-US023475.  
 PR 23-JUL-2001; 2001US-0307345P.  
 PA (IMMV ) IMMUNEX CORP.  
 PI Lyman SD, Van Ness KP, Paxton RJ;  
 DR WPI; 2003-393470/37.  
 DR N-PSDB; AAD56172.  
 PT New modified human thymic stromal lymphopoietin (TSLP) protein and  
 PT polynucleotide, useful for stimulating lymphocyte proliferation of  
 PT lymphopoiesis, particularly as a vaccine for treating e.g. AIDS or  
 PT autoimmune diseases.  
 PS Claim 10; Page 40-41; 52pp; English.  
 XX The invention relates to modified human thymic stromal lymphopoietin  
 CC (TSLP) protein and polynucleotide sequences. TSLP protein is useful for  
 CC stimulating lymphocyte proliferation of lymphopoiesis, or inducing STARS.  
 CC TSLP DNA is useful for producing a furin-resistant polypeptide having at  
 CC least one functional human TSLP activity. The invention is useful in the  
 CC manufacture of a medicament for stimulating lymphocyte proliferation, for  
 CC promoting lymphopoiesis, or for inducing phosphorylation of STARS. It is  
 CC also useful as a vaccine for treating AIDS, autoimmune diseases (e.g.  
 CC transplant rejection), or bacterial or viral infections. The present  
 CC sequence is human TSLP protein  
 SQ Sequence 159 AA;

Query Match 91.9%; Score 707; DB 6; Length 159;  
 Best Local Similarity 96.5%; Pred. No. 3.3e-73;  
 Matches 139; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 6 MPPFALLVYLSVSFRKIFILQVGLVLTVDFTNCDPEKIKAAVLTSTISKDLITVMSGTGS 65  
 DB 1 MPPFALLVYLSVSFRKIFILQVGLVLTVDFTNCDPEKIKAAVLTSTISKDLITVMSGTGS 60

QY 66 TEFNNVTSCSNRPHCLTEIOSLTFFNPNRRVRSIAKEMFAMKTKAALAIWCPGYSETOINA 125  
 DB 61 TEFNNVTSCSNRPHCLTEIOSLTFFNPNRRVRSIAKEMFAMKTKAALAIWCPGYSETOINA 120

QY 126 TQAMKRRRRKRVTTNKCLEQVSQ 149  
 DB 121 TQAMKRRRRKRVTTNKCLEQVSQ 144

RESULT 9  
 ADD05353  
 ID ADD05353 standard; protein; 159 AA.  
 AC ADD05353;  
 XX  
 XX 01-JAN-2004 (first entry)  
 XX  
 XX Human interleukin-B50 (IL-B50) polypeptide #2.  
 DE  
 XX Human interleukin-B50; IL-B50; immune disorder; T cell immunodeficiency;  
 KM chronic inflammation; tissue rejection; cardiovascular condition;  
 KW rheumatoid arthritis; chronic inflammation; immunosuppressive;  
 KM immunostimulant; cardiant; neuroprotective.  
 XX  
 OS Homo sapiens.  
 XX  
 PN US003099947-A1.  
 PD 29-MAY-2003.  
 XX  
 PF 25-SEP-2001; 2001US-00963347.  
 XX  
 PR 21-SEP-1998; 98US-0101318P.  
 PR 27-APR-1999; 99US-0131298P.  
 PR 20-SEP-1999; 99US-00399492.  
 XX  
 PA (BAZA/) BAZAN J F.  
 PA (MALE/) DE WAAL MALEFYT R.  
 PA (LIUY/) LIU Y.  
 PA (SOUN/) SOUNELIS V.  
 PI BAZAN JF, De Waal Malefyt R, Liu Y, Soumelis V;  
 PI WPI; 2003-777307/73.  
 DR N-PSDB; ADD05352.  
 XX  
 PT Novel isolated or recombinant polynucleotide encoding antigenic human  
 PT interleukin-B50 sequence which is useful for treating T cell  
 PT immunodeficiencies, chronic inflammation or tissue rejection, or  
 PT cardiovascular conditions.  
 XX  
 PS Claim 16; SEQ ID NO 4; 54pp; English.  
 XX  
 CC The invention relates to the human interleukin-B50 (IL-B50) polypeptide  
 CC and the polynucleotide encoding it. The polypeptide is useful for making  
 CC an antigenic polypeptide. The antigenic polypeptide is useful for binding  
 CC an antigen in a biological sample, where it forms a binding compound-  
 CC antigen complex. The polypeptide is also useful in forensic sciences to  
 CC distinguish rodent from human, or as a marker for distinguishing between  
 CC different cells exhibiting differential expression or modification  
 CC patterns. The sequences are useful for treating abnormal medical  
 CC conditions such as immune disorders e.g. T cell immunodeficiencies,  
 CC chronic inflammation or tissue rejection, or cardiovascular or  
 CC neurophysiological conditions. This sequence represents a human IL-B50

CC polypeptide of the invention.  
 XX  
 SQ Sequence 159 AA;  
 QY 6 MPPFALLVYLSVSFRKIFILQVGLVLTVDFTNCDPEKIKAAVLTSTISKDLITVMSGTGS 65  
 DB 1 MPPFALLVYLSVSFRKIFILQVGLVLTVDFTNCDPEKIKAAVLTSTISKDLITVMSGTGS 60

QY 66 TEFNNVTSCSNRPHCLTEIOSLTFFNPNRRVRSIAKEMFAMKTKAALAIWCPGYSETOINA 125  
 DB 61 TEFNNVTSCSNRPHCLTEIOSLTFFNPNRRVRSIAKEMFAMKTKAALAIWCPGYSETOINA 120

QY 126 TQAMKRRRRKRVTTNKCLEQVSQ 149  
 DB 121 TQAMKRRRRKRVTTNKCLEQVSQ 144

RESULT 10  
 ADF29182  
 ID ADF29182 standard; protein; 159 AA.  
 AC ADF29182;  
 XX  
 XX 12-FEB-2004 (first entry)  
 XX  
 XX Human JY1, SEQ ID 2.  
 DE  
 XX Human; lymphokine; JY1 protein; TSLP; tumour; inflammation;  
 KM immunological system disease; cytostatic; anti-inflammatory.  
 XX  
 OS Homo sapiens.  
 XX  
 PN CN1385441-A.  
 PD 18-DEC-2002.  
 XX  
 PF 16-MAY-2001; 2001CN-00112889.  
 XX  
 PR 16-MAY-2001; 2001CN-00112889.  
 XX  
 PA (LUOY/) LUO Y.  
 PI Luo Y, Wu J;  
 PI WPI; 2003-279588/28.  
 DR N-PSDB; ADF29181.  
 XX  
 PT Novel human lymphokine, its coding sequence and use for treating tumor.  
 PT Claim 1; Page 20; 30pp; Chinese.  
 XX  
 PS The present invention provides a novel human lymphokine-JY1 protein  
 CC (ADF29182) and its coding sequence (ADF29181). JY1 protein is a  
 CC homogeneous molecule of TSLP. The invention also discloses the  
 CC application of the JY1 protein coding sequence, and also discloses the  
 CC method for curing several diseases (such as tumour, inflammation and  
 CC immunological system diseases) by using the JY1 protein receptor.  
 XX  
 SQ Sequence 159 AA;  
 QY 6 MPPFALLVYLSVSFRKIFILQVGLVLTVDFTNCDPEKIKAAVLTSTISKDLITVMSGTGS 65  
 DB 1 MPPFALLVYLSVSFRKIFILQVGLVLTVDFTNCDPEKIKAAVLTSTISKDLITVMSGTGS 60

QY 66 TEFNNVTSCSNRPHCLTEIOSLTFFNPNRRVRSIAKEMFAMKTKAALAIWCPGYSETOINA 125

Db 61 TEFNNVSCSNRPCLTIEIOSLTFFNPTAGCASLAKEMFAKTKAALAIWCPGSETQINA 120  
 Oy 126 TOAMKRRKRRKVTNNKCLEQVSOL 149  
 Db 121 TOAMKRRKRRKVTNNKCLEQVSOL 144

RESULT 11  
 ADG43811  
 ID ADG43811 standard; protein; 159 AA.  
 AC ADG43811;  
 DT 26-FEB-2004 (first entry)  
 DE Human thymic stromal lymphopoietin (TSLP/IL-50) SEQ ID NO:1.  
 DE  
 XX antigen presenting cell; APC; T-cell; thymic stromal lymphopoietin; TSLP;  
 KM interleukin-50; IL-50; receptor; antiinflammatory; antiproliferative;  
 KM antiarthritic; antiasthmatic; respiratory-gen.; immunostimulant;  
 KM gene therapy; dendritic cell activity; immune disorder;  
 KM inflammatory disorder; psoriasis; psoriatic arthritis; asthma;  
 KM chronic obstructive pulmonary disorder; COPD; immunodeficiency.  
 KM  
 XX Homo sapiens.  
 OS  
 XX MO2003065985-A2.  
 PN  
 XX 14-AUG-2003.  
 PD  
 XX 30-JAN-2003; 2003WO-US002758.  
 PF  
 XX 01-FEB-2002; 2002US-0353509P.  
 PR  
 XX (SCHE ) SCHERING CORP.  
 PA  
 XX De Waal Malefyt R, Liu Y, Nagalakshmi ML, Soumelis V, Watanabe N,  
 PI Yuan W,  
 PI  
 XX WPI; 2003-731469/69.  
 DR  
 XX  
 PT Modulating antigen presenting cell (APC) priming of a T-cell, useful for  
 PT e.g. asthma, comprises contacting the APC with an agonist or antagonist  
 PT of thymic stromal lymphopoietin (TSLP)/interleukin (IL)-50 or TSLP/IL-50  
 PT receptor.  
 PT  
 XX  
 PS Claim 1; Page 39; 22pp; English.  
 PS  
 XX The invention relates to a novel method of modulating antigen presenting  
 CC cell (APC) priming of a T-cell by contacting the APC with an agonist or  
 CC antagonist of thymic stromal lymphopoietin (TSLP)/interleukin (IL)-50 or  
 CC TSLP/IL-50 receptor (TSLP/IL-50R). The method of the invention has  
 CC antiinflammatory, antiproliferative, antiarthritic, antiasthmatic,  
 CC respiratory-gen., and immunostimulant activity. The method may have a use  
 CC in gene therapy. The method is useful in modulating dendritic cell  
 CC activity using agonists or antagonists of a mammalian cytokine, or in  
 CC treating immune or inflammatory disorders such as psoriasis, psoriatic  
 CC arthritis, asthma, chronic obstructive pulmonary disorder (COPD) or an  
 CC immunodeficiency resulting from cyroablation or viral infection. The  
 CC present sequence represents the human thymic stromal lymphopoietin of the  
 CC invention.  
 CC  
 XX Sequence 159 AA;  
 SQ

Query Match 91.9%; Score 707; DB 7; Length 159;  
 Best Local Similarity 96.5%; Pred. No. 3.3e-73;  
 Matches 139; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Oy 6 MPPFALLVLSVSFRKIFILQVLGVLTVDFTNCPDEKIKAAVLSITSDLTITMSGTGS 65  
 CC 1 MPPFALLVLSVSFRKIFILQVLGVLTVDFTNCPDEKIKAAVLSITSDLTITMSGTGS 60  
 Db

Oy 66 TEFNNVSCSNRPCLTIEIOSLTFFNPTAGCASLAKEMFAKTKAALAIWCPGSETQINA 125  
 Db 61 TEFNNVSCSNRPCLTIEIOSLTFFNPTAGCASLAKEMFAKTKAALAIWCPGSETQINA 120  
 Oy 126 TOAMKRRKRRKVTNNKCLEQVSOL 149  
 Db 121 TOAMKRRKRRKVTNNKCLEQVSOL 144

RESULT 12  
 ADO50320  
 ID ADO50320 standard; protein; 159 AA.  
 AC ADO50320;  
 DT 29-JUL-2004 (first entry)  
 DE Human IL-B50 protein #2.  
 DE  
 XX Cytokine; interleukin-B50; IL-B50; differentiation; haematopoietic cell;  
 KM immune disorder; T cell immune deficiency; chronic inflammation;  
 KM tissue rejection; cardiovascular; neurophysiological; antigen; immunogen;  
 KM human.  
 KM  
 XX Homo sapiens.  
 OS  
 XX  
 XX Key Location/Qualifiers  
 FH Peptide 1..28  
 FT /label=Signal\_peptide  
 FT Protein 29..159  
 FT /label=Mature\_IL-B50  
 FT Region 38..54  
 FT /label=Helix\_A  
 FT Region 66..69  
 FT /label=Strand\_1  
 FT Region 74..85  
 FT /label=Helix\_B  
 FT Region 96..110  
 FT /label=Helix\_C  
 FT Modified-site 119  
 FT /note="N-glycosylated"  
 FT Region 132..134  
 FT /label=Strand\_2  
 FT Region 135..155  
 FT /label=Helix\_D  
 PN US2004091970-A1.  
 PN  
 XX 13-MAY-2004.  
 PD  
 XX 20-JUN-2003; 2003US-00601105.  
 PF  
 XX 21-SEP-1998; 98US-0101318P.  
 PR 27-APR-1999; 99US-0131298P.  
 PR 20-SEP-1999; 99US-00399492.  
 PR 25-SEP-2001; 2001US-00963347.  
 PA (SCHE ) SCHERING CORP.  
 PI Bazan JF, De Waal Malefyt R, Liu Y, Soumelis V,  
 PI N-PSDB; ADO50319.  
 DR WPI; 2004-374953/35.  
 DR  
 XX Novel isolated or recombinant polynucleotide such as cytokine e.g., IL-  
 PT B50 useful for producing an antigenic polypeptide, for treating T cell  
 PT immune deficiencies, chronic inflammation, tissue rejection or  
 PT cardiovascular conditions.  
 PT  
 XX Claim 16; SEQ ID NO 4; 55pp; English.  
 PS The invention relates to polynucleotide encoding cytokine interleukin-B50  
 CC (IL-B50). The polynucleotide and polypeptide of the invention are useful

CC for regulating activation, development, differentiation and function of  
 CC various cell types, including haematopoietic cells, for treating abnormal  
 CC medical conditions e.g., immune disorders such as T cell immune  
 CC deficiencies, chronic inflammation, tissue rejection, cardiovascular or  
 CC neurophysiological conditions. The polypeptide is useful as antigen e.g.,  
 CC immunogen, for raising antibodies to various epitopes on the protein, IL  
 CC both linear and conformational epitopes. The present sequence is human IL  
 CC -B50.  
 CC  
 CC  
 CC

XX  
 SQ Sequence 159 AA:

Query Match 91.9%; Score 707; DB 8; Length 159;  
 Best Local Similarity 96.5%; Pred. No. 3.3e-73;  
 Matches 139; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 6 MFPPALLYLVSVSRKIFILQVLGVLTVDFTNCDPEKIKAAVLTSTSKDLITVSGTGS 65  
 DB 1 MFPPALLYLVSVSRKIFILQVLGVLTVDFTNCDPEKIKAAVLTSTSKDLITVSGTGS 60  
 QY 66 TEFNNTVSCSNRPHCLTEIQSLTFNPNRRVRSIAKEMFAMTKAALAIWCPGYSETOINA 125  
 DB 61 TEFNNTVSCSNRPHCLTEIQSLTFNPNRRVRSIAKEMFAMTKAALAIWCPGYSETOINA 120  
 QY 126 TOAMKKRRKRVTKTKCLEQVSOL 149  
 DB 121 TOAMKKRRKRVTKTKCLEQVSOL 144

RESULT 13

AAE37163  
 ID AAE37163 standard; protein; 160 AA.

XX  
 AC AAE37163;

XX  
 DT 07-AUG-2003 (first entry)

XX  
 DE Human thymic stromal lymphopoietin (TSLP) mutant protein #3.

XX  
 KW Thymic stromal lymphopoietin; TSLP; lymphopoesis; STATS; antibacterial;  
 KW furin-resistant protein; lymphocyte; vaccine; AIDS; autoimmune disease;  
 KW transplant rejection; infection; immunosuppressive; immunostimulant;  
 KW virucide; human; mutant; mutcin.

XX  
 OS Homo sapiens.  
 OS Synthetic.

XX  
 FT Key Location/Qualifiers

FT Misc-difference 130  
 FT /note= "Wild-type Arg is substituted with Xaa, where Xaa  
 FT is any amino acid other than Arg or Lys"

XX  
 PN WO2003032898-A2.

XX  
 PD 24-APR-2003.

XX  
 PF 23-JUL-2002; 2002WO-US023475.

XX  
 PR 23-JUL-2001; 2001US-0307345P.

XX  
 PA (IMMV ) IMMUNEX CORP.

XX  
 PI Lyman SD, Van Ness KP, Paxton RJ;

XX  
 DR WPI; 2003-393470/37.

XX  
 PT New modified human thymic stromal lymphopoietin (TSLP) protein and  
 PT polynucleotide, useful for stimulating lymphocyte proliferation of  
 PT lymphopoesis, particularly as a vaccine for treating e.g. AIDS or  
 PT autoimmune diseases.

XX  
 PS Claim 11, Page 51; 52pp; English.

XX  
 CC The invention relates to modified human thymic stromal lymphopoietin

CC (TSLP) protein and polynucleotide sequences. TSLP protein is useful for  
 CC stimulating lymphocyte proliferation of lymphopoesis, or inducing STATS.  
 CC TSLP DNA is useful for producing a furin-resistant polypeptide having at  
 CC least one functional human TSLP activity. The invention is useful in the  
 CC manufacture of a medicament for stimulating lymphocyte proliferation, for  
 CC promoting lymphopoesis, or for inducing phosphorylation of STATS. It is  
 CC also useful as a vaccine for treating AIDS, autoimmune diseases (e.g.  
 CC transplant rejection), or bacterial or viral infections. The present  
 CC sequence is human TSLP mutant protein  
 CC  
 CC  
 CC

XX  
 SQ Sequence 160 AA:

Query Match 90.6%; Score 696.5; DB 6; Length 160;  
 Best Local Similarity 95.9%; Pred. No. 5.5e-72;  
 Matches 139; Conservative 0; Mismatches 5; Indels 1; Gaps 1;

QY 6 MFPPALLYLVSVSRKIFILQVLGVLTVDFTNCDPEKIKAAVLTSTSKDLITVSGTGS 65  
 DB 1 MFPPALLYLVSVSRKIFILQVLGVLTVDFTNCDPEKIKAAVLTSTSKDLITVSGTGS 60  
 QY 66 TEFNNTVSCSNRPHCLTEIQSLTFNPNRRVRSIAKEMFAMTKAALAIWCPGYSETOINA 125  
 DB 61 TEFNNTVSCSNRPHCLTEIQSLTFNPNRRVRSIAKEMFAMTKAALAIWCPGYSETOINA 120  
 QY 126 TOAMKKRRKRVTKTKCLEQVSOL 149  
 DB 121 TOAMKKRRKRVTKTKCLEQVSOL 145

RESULT 14

AAE37162  
 ID AAE37162 standard; protein; 159 AA.

XX  
 AC AAE37162;

XX  
 DT 07-AUG-2003 (first entry)

XX  
 DE Human thymic stromal lymphopoietin (TSLP) mutant protein #2.

XX  
 KW Thymic stromal lymphopoietin; TSLP; lymphopoesis; STATS; antibacterial;  
 KW furin-resistant protein; lymphocyte; vaccine; AIDS; autoimmune disease;  
 KW transplant rejection; infection; immunosuppressive; immunostimulant;  
 KW virucide; human; mutant; mutcin.

XX  
 OS Homo sapiens.  
 OS Synthetic.

XX  
 FT Key Location/Qualifiers

FT Misc-difference 127  
 FT /note= "Wild-type Arg is substituted with Xaa, where Xaa  
 FT is any amino acid other than Arg or Lys"

FT Misc-difference 128  
 FT /note= "Wild-type Arg is substituted with Xaa, where Xaa  
 FT is any amino acid other than Arg or Lys"

FT Misc-difference 129  
 FT /note= "Wild-type Lys is substituted with Xaa, where Xaa  
 FT is any amino acid other than Arg or Lys"

XX  
 PN WO2003032898-A2.

XX  
 PD 24-APR-2003.

XX  
 PF 23-JUL-2002; 2002WO-US023475.

XX  
 PR 23-JUL-2001; 2001US-0307345P.

XX  
 PA (IMMV ) IMMUNEX CORP.

XX  
 PI Lyman SD, Van Ness KP, Paxton RJ;

XX  
 DR WPI; 2003-393470/37.

XX  
 PT New modified human thymic stromal lymphopoietin (TSLP) protein and



PT polynucleotide, useful for stimulating lymphocyte proliferation of  
PT lymphoproliferation, particularly as a vaccine for treating e.g. AIDS or  
PT autoimmune diseases.

Claim 11; Page 50; 52pp; English.

CC The invention relates to modified human thymic stromal lymphopoietin  
CC (TSLP) protein and polynucleotide sequences. TSLP protein is useful for  
CC stimulating lymphocyte proliferation of lymphoproliferation, or inducing STARS.  
CC TSLP DNA is useful for producing a furin-resistant polypeptide having at  
CC least one functional human TSLP activity. The invention is useful in the  
CC manufacture of a medicament for stimulating lymphocyte proliferation, for  
CC promoting lymphoproliferation, or for inducing phosphorylation of STARS. It is  
CC also useful as a vaccine for treating AIDS, autoimmune diseases (e.g.  
CC transplant rejection), or bacterial or viral infections. The present  
CC sequence is human TSLP mutant protein

Sequence 159 AA;

Query Match 89.6%; Score 689; DB 6; Length 159;  
Best Local Similarity 94.4%; Pred. No. 4e-71;  
Matches 136; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 6 MPPFALLVLSVSFRKIFILQVGLVLTVDFTNCFEKKIKAAYLSTISDILTYMSGTS 65  
DB 1 MPPFALLVLSVSFRKIFILQVGLVLTVDFTNCFEKKIKAAYLSTISDILTYMSGTS 60

QY 66 TEFNNTVSCSNRPHCLTEIQSLTFPNRRVRSIAKEMFAMKTKAALAIWCPGYSETOINA 125  
DB 61 TEFNNTVSCSNRPHCLTEIQSLTFPNRRVRSIAKEMFAMKTKAALAIWCPGYSETOINA 120

QY 126 TQAMKKRRKRRKTTNKCLEQVSOL 149  
DB 121 TQAMKKRRKRRKTTNKCLEQVSOL 144

RESULT 15

AAB37158  
ID AAB37158 standard; protein; 159 AA.

AC AAB37158;

DT 07-AUG-2003 (first entry)

DE Human thymic stromal lymphopoietin (TSLP) mutant #1.

KW Thymic stromal lymphopoietin; TSLP; lymphoproliferation; STARS; antibacterial;  
KW furin-resistant protein; lymphocyte; vaccine; AIDS; autoimmune disease;  
KW transplant rejection; infection; immunosuppressive; immunostimulant;

KM virucide; human; mutant; mutagen.

XX Homo sapiens.

OS Synthetic.

XX Location/Qualifiers

FT Key 127 /note= "Wild-type Arg is substituted with Xaa, where Xaa  
FT M18c-difference 127 is any amino acid other than Arg or Lys"

FT M18c-difference 128 /note= "Wild-type Arg is substituted with Xaa, where Xaa  
FT M18c-difference 128 is any amino acid other than Arg or Lys"

FT M18c-difference 129 /note= "Wild-type Arg is substituted with Xaa, where Xaa  
FT M18c-difference 129 is any amino acid other than Arg or Lys"

FT M18c-difference 130 /note= "Wild-type Lys is substituted with Xaa, where Xaa  
FT M18c-difference 130 is any amino acid other than Arg or Lys"

FT M18c-difference 131 /note= "Wild-type Arg is substituted with Xaa, where Xaa  
FT M18c-difference 131 is any amino acid other than Arg or Lys"

FT M18c-difference 132 /note= "Wild-type Lys is substituted with Xaa, where Xaa  
FT M18c-difference 132 is any amino acid other than Arg or Lys"

FT M18c-difference 133 /note= "Wild-type Lys is substituted with Xaa, where Xaa  
FT M18c-difference 133 is any amino acid other than Arg or Lys"

XX MO2003032898-A2.

PD 24-APR-2003.

XX 23-JUL-2002; 2002MO-US023475.

XX 23-JUL-2001; 2001US-0307345P.

XX (IMMUNEX) IMMUNEX CORP.

PI Lyman SD, Van Ness KP, Paxton RJ,

XX WPI; 2003-393470/37.

DR N-PSDB; AAD56175.

PT New modified human thymic stromal lymphopoietin (TSLP) protein and  
PT polynucleotide, useful for stimulating lymphocyte proliferation of  
PT lymphoproliferation, particularly as a vaccine for treating e.g. AIDS or  
PT autoimmune diseases.

Claim 11; Page 44; 52pp; English.

CC The invention relates to modified human thymic stromal lymphopoietin  
CC (TSLP) protein and polynucleotide sequences. TSLP protein is useful for  
CC stimulating lymphocyte proliferation of lymphoproliferation, or inducing STARS.  
CC TSLP DNA is useful for producing a furin-resistant polypeptide having at  
CC least one functional human TSLP activity. The invention is useful in the  
CC manufacture of a medicament for stimulating lymphocyte proliferation, for  
CC promoting lymphoproliferation, or for inducing phosphorylation of STARS. It is  
CC also useful as a vaccine for treating AIDS, autoimmune diseases (e.g.  
CC transplant rejection), or bacterial or viral infections. The present  
CC sequence is human TSLP mutant protein

Sequence 159 AA;

Query Match 88.0%; Score 677; DB 6; Length 159;  
Best Local Similarity 93.1%; Pred. No. 9.8e-70;  
Matches 134; Conservative 0; Mismatches 10; Indels 0; Gaps 0;

QY 6 MPPFALLVLSVSFRKIFILQVGLVLTVDFTNCFEKKIKAAYLSTISDILTYMSGTS 65  
DB 1 MPPFALLVLSVSFRKIFILQVGLVLTVDFTNCFEKKIKAAYLSTISDILTYMSGTS 60

QY 66 TEFNNTVSCSNRPHCLTEIQSLTFPNRRVRSIAKEMFAMKTKAALAIWCPGYSETOINA 125  
DB 61 TEFNNTVSCSNRPHCLTEIQSLTFPNRRVRSIAKEMFAMKTKAALAIWCPGYSETOINA 120

QY 126 TQAMKKRRKRRKTTNKCLEQVSOL 149  
DB 121 TQAMKKRRKRRKTTNKCLEQVSOL 144

Search completed: October 17, 2005, 12:21:02  
Job time : 118.62 secs